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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,382	01/31/2002	Dennis J. O'Rear	005950-747	7472

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EXAMINER	
NGUYEN, TAM M	
ART UNIT	*PAPER NUMBER*
1764	

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/059,382	O'REAR ET AL.	
	Examiner	Art Unit	
	Tam M. Nguyen	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *12,22,23 and 41-43* is/are withdrawn from consideration.

5)☒ Claim(s) *24-40* is/are allowed.

6)☒ Claim(s) *1-11 and 13-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 April 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10/2/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-11 and 13-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15, 19-35 and 39-42 of copending Application No. 10/059,383. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims claim a process for producing gasoline from a Fischer-Tropsch product by hydrotreating to remove oxygenates from a naphtha feedstock and reforming the hydrotreated feedstock. The present claimed process does not specifically disclose that oxygenates are removed in the hydrotreating step. However, the treating step of the present claimed process is similar to the claimed process of the copending application. Therefore, it would be expected that oxygenates are moved in the hydrotreating step of the claimed process of copending applicant as claimed.

Claims 1-11 and 13-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11, 13-21 and 24-40 of copending Application No. 10/059,381. Although the conflicting claims are not identical, they

are not patentably distinct from each other because both sets of claims claim a process for producing gasoline from a Fischer-Tropsch product by hydrotreating and reforming. The present claimed process does not specifically disclose that oxygenates are removed in the hydrotreating step. However, the treating step of the present claimed process is similar to the claimed process of the copending application. Therefore, it would be expected that oxygenates are removed in the hydrotreating step of the claimed process of copending applicant as claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 6, 8, 10, 11, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Donald.M Little "Catalyst Reforming, PennWell Books" 1985 in view of Derr et al. (4,080,397).

Little discloses a reforming process of a naphtha (e.g., Fischer-Tropsch naphtha) to produce gasoline having an octane number greater than 100 RON by contacting the naphtha with a catalyst. Little discloses that the hydrogen produced from the reforming step can be used in a hydrotreating process. Little also discloses that the gasoline product comprises at least 10 wt. % of aromatics. (See Preface, pages 1-5, 24-27, 40-63, 122)

Little does not disclose that the naphtha feedstock is hydrotreated to remove oxygenates from the naphtha.

Derr discloses a process for producing a distillate (e.g., gasoline) by combining a Fischer-Tropsch naphtha with a petroleum fraction having a high level of sulfur to produce a combined feed having a sulfur content of greater than 10 ppm. The combined feed is then hydrotreated to remove oxygenates from it wherein the hydrotreating catalyst comprises a sulfide non-noble metal such as Ni and Mo. (See abstract; col. 2, line 5 through col. 5, line 15)

Derr does not disclose a reforming process of the naphtha as claimed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Little by using a naphtha which has been treated to remove oxygenates as taught by Derr because any naphtha boiling with gasoline ranges can be used in the process of Little to produce a high octane gasoline.

Both Little and Derr do not specifically disclose that a FT naphtha is mixed with a petroleum derived naphtha. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Little/Derr by using a petroleum distillate because any petroleum fraction which contains sulfur and hydrocarbons that are similar to the FT product can be used in the process of Derr. Therefore, it would be expected that the results would be the same or similar when using either the Derr petroleum fraction or the claimed petroleum distillate in the process of Derr/Little

Claims 4, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claim 1 above, and further in view of Moore (6,583,186).

Both Little and Derr do not disclose that the hydrotreating catalyst comprises noble metal such as Pt.

Moore discloses a hydrotreating catalyst comprising Pt or Ni wherein the catalyst is either sulfided or not sulfided. (See col. 10, line 23 through col. 11, line 32)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr/Little by using a catalyst comprising Pt as taught by Moore because Pt has equivalent function as Ni.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr/Little by using a catalyst which is not

sulfided because Moore discloses that the hydrotreating catalyst can be either an oxide or a sulfide.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claims 1-2 above, and further in view of Miller (4,673,487).

Both Little and Derr do not disclose that the sulfiding agent is dimethyldisulfide.

Miller discloses a step of sulfiding the catalyst by treating the catalyst with dimethyldisulfide (see col. 4, lines 21-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Litt/Derr by sulfiding the catalyst with dimethyldisulfide as taught by Miller because dimethyldisulfide is an effective sulfiding agent.

Claims 13, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Derr et al. (4,080,397).

Derr discloses a process for producing a distillate or a lube base stock by combining a Fischer-Tropsch product with a petroleum fraction having a high level of sulfur to produce a combined feed having a sulfur content of greater than 10 ppm. The combined feed is then hydrotreated to remove oxygenates from it wherein the hydrotreating catalyst comprises a sulfide non-noble metal such as Ni and Mo. The hydrotreated product is then upgraded (e.g., hydrocracking or hydrodewaxing) to produce lube base stock. Derr also discloses that the feedstock comprises more than 1 ppm or 10 ppm of sulfur prior to the hydrotreating step. (See abstract; col. 2, line 5 through col. 5, line 15)

Derr does not specifically disclose that a FT distillate is mixed with a petroleum derived distillate. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by using a petroleum distillate because any petroleum fraction which contains sulfur and hydrocarbons that are similar to the FT product can be used in the process of Derr. Therefore, it would be expected that the results would be the same or similar when using either the Derr petroleum fraction or the claimed petroleum distillate in the process of Derr.

Claims 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claim 13 above, and further in view of Moore (6,583,186).

Derr does not disclose that the hydrotreating catalyst comprises noble metal such as Pt.

Moore discloses a hydrotreating catalyst comprising Pt or Ni wherein the catalyst is either sulfided or not sulfided. (See col. 10, line 23 through col. 11, line 32)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by using a catalyst comprising Pt because Pt has equivalent function as Ni.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by using a catalyst which is not sulfided because Moore discloses that the hydrotreating catalyst can be either an oxide or a sulfide.

Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claim 18 above, and further in view of Miller (4,673,487).

Derr does not disclose that the sulfiding agent is dimethyldisulfide.

Miller discloses a step of sulfiding the catalyst by treating the catalyst with dimethyldisulfide (see col. 4, lines 21-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by sulfiding the catalyst with dimethyldisulfide as taught by Miller because dimethyldisulfide is an effective sulfiding agent. sulfide.

Election/Restrictions

Applicant's election with traverse of Group I filed on September 23, 2003 is acknowledged. The traversal is on the ground(s) that the examination of the subject matter of Group I would likely encompass a search for the subject matter of Group II and additional search would not impose a serious burden. This is not found persuasive because the search required for Group II is not required for Group I because Group II is directed to a composition which can be made by hundreds of methods. Therefore, searching the composition in all of the methods (that are different from the method of Group I) is a serious burden.

The requirement is still deemed proper and is therefore made FINAL.

Allowable Subject Matter

Claims 24-40 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: No prior art of record discloses a renders obvious a process for upgrading at least one of Fischer-Tropsch naphtha and Fischer-Tropsch distillate to produce at least one gasoline component by

mixing a Fischer-Tropsch naphtha with a petroleum-derived naphtha to produce a blended naphtha having a sulfur level of at least 1 ppm and mixing a Fischer-Tropsch distillate and a petroleum-derived distillate to produce a blended distillate having a sulfur level of at least 1 ppm and reforming and upgrading the blended naphtha and distillate as called for in claim 14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (703) 305-7715. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone numbers for the organization where this application or proceeding is assigned are 571-272-1452 for regular communications and (703) 305-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tam M. Nguyen
Examiner
Art Unit 1764

TN
December 15, 2003

Walter D. Griffin
Primary Examiner